

Remarks

The applicant thanks examiners Rene Garcia and Stephen Meiers for the interview on May 3, 2007, with the applicant's representatives, Mel Biggs and Erin Henson of FUJIFILM Dimatix, Inc. The interview included a discussion of the section 102 rejection of the claims based on the Takahashi reference (U.S. 6,099,103) and the Korol reference (U.S. 2001/0022596). The examiners and representatives also discussed amending claim 1 to recite, "applying a multipulse waveform...wherein all the pulses increase the volume of the single droplet," A feature that has now been included in new claim 42.

[Each of the applicant's comments below is preceded by related statements in the action dated February 22, 2007, quoted in small type.]

Claims 25-27 are objected to because of the following informalities: the term "mass" has been used to describe desired limitation of a droplet, however mass is typically quantified in terms of grams not pico liters as set forth in claims. Pico liter is a volume quantifier and either mass is to be disclosed or a volume but appropriate quantifier is required. For purpose of examination a volume is used to reject claims. Appropriate correction is required.

The applicant has amended claims 25-27.

Claims 16, 29-31 & 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The primary reason for the allowance of claim 16 is the inclusion of the method steps of an ink jet recording device that includes amplitude of each subsequent pulse in the two or more pulses is greater than the amplitude of earlier pulses. It is these steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art. (office action, p. 8-9)

The applicant acknowledges the examiner's indication of the patentability of claim 16. Applicant has amended independent claim 1 to include the allowable subject matter of claim 16. The applicant does not concede that there are not other good reasons for patentability of claim 1 and other claims.

Claims 18-27 are rejected under 35.U.S.C. 102(b) as being anticipated by Korol (US 200110022596)

Korol discloses the following claim limitations:

*regarding claims 18 & 21, method comprising driving a piezoelectric droplet ejection device/ink jet, 10/ (fig. 1; 70033) with a waveform (fig. 2a, 2b) comprising:

*one or more pulses each having a period less than about 20 microseconds to cause the droplet ejection device to eject a single droplet in response to the pulses (fig. 2a; ¶0036,0038,0039,0040- in particular contains a pulse component/116/ with period of $9\mu\text{s}$ [one or more])

Like claim 1, claim 18 has been amended to include the feature “the amplitude of each subsequent pulse in the two or more pulses being greater than the amplitude of earlier pulses.”

Claims 16, 29-31 & 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason for the allowance of claims 29-31 and 34 is the inclusion of the limitations being for a droplet ejection device wherein harmonic content of the plurality of drive pulses at f_j is less than about 50% of the harmonic content of the plurality of the drive pulses at f_{max} the frequency of maximum content. It is these limitations found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The applicant acknowledges the examiner's indication of the patentability of claim 29. The applicant has amended claim 28 to include the allowable subject matter of claim 29. The applicant does not concede that there are not other good reasons for the patentability of claim 28 and other claims.

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

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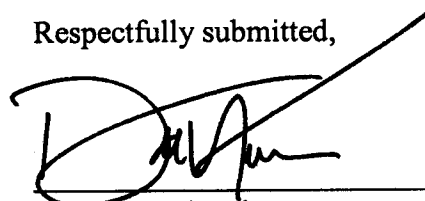
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Respectfully submitted,



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